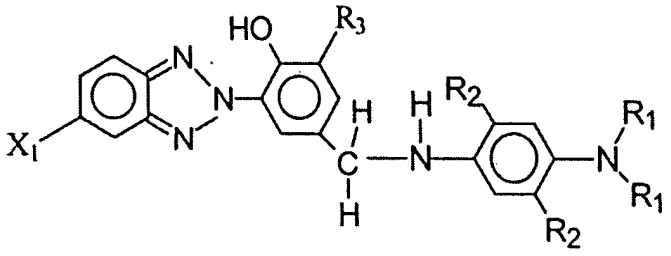
WE CLAIM:

1. A functionalized benzotriazole compound of general Formula I



Formula I

wherein

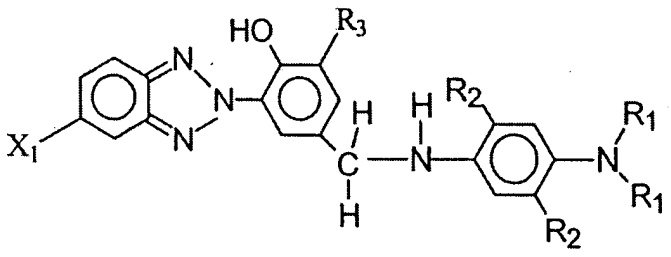
R_1 and R_2 are selected from the group consisting of C_1 to C_8 linear and branched alkyls,

R_3 is selected from the group consisting of hydrogen and tert-butyl, and

X_1 is selected from the group consisting of hydrogen, halogen, tert-butyl and C_1 to C_{12} alkoxy;

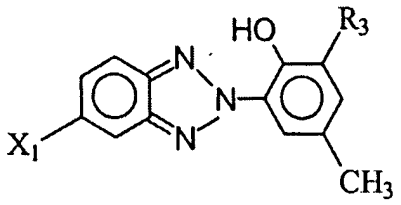
and wherein the compound has antioxidant and antiozonant properties.

2. A process for preparing a functionalized benzotriazole having general Formula I comprising



Formula I

(a) dissolving a compound of general Formula III with bromine in a nonpolar organic solvent at a temperature between 45 to 85°C for a period of 4 to 9 hours,



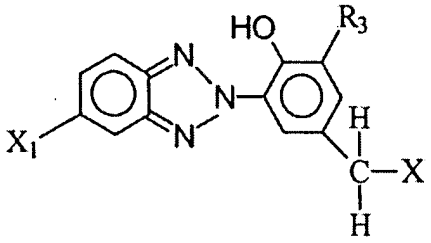
Formula III

wherein

R_3 is selected from the group consisting of hydrogen and tert-butyl,

X_1 is selected from the group consisting of hydrogen, halogen, tert-butyl and C_1 to C_{12} alkoxy;

(b) evaporating the nonpolar solvent under reduced pressure to obtain a compound having general Formula II,



Formula II

wherein

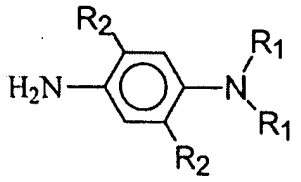
R_3 is selected from the group consisting of hydrogen and tert-butyl,

X_1 is selected from the group consisting hydrogen, halogen, tert-butyl and C_1 to C_{12} alkoxy, and

X is Br;

(c) reacting the compound of general Formula II with a compound having a

general Formula IV in the presence of an organic solvent and a mild base at a temperature of 45-85 °C for a period of 4 to 5 hours to produce a reaction mixture,



Formula IV

wherein

R_1 and R_2 are selected from the group consisting of C_1 to C_8 linear and branched alkyl;

(d) bringing the reaction mixture to room temperature, wherein the reaction mixture has an organic layer containing the functionalized benzotriazole;

(e) separating the organic layer;

(f) concentrating the functionalized benzotriazole by solvent evaporation under reduced pressure; and

(g) purifying the functionalized benzotriazole by column chromatography.

3. The process of claim 2, wherein the nonpolar organic solvent is a chlorinated solvent selected from the group consisting of carbon tetrachloride, chloroform, chlorobenzene and dichloromethane.

4. The process of claim 2, wherein the compound of Formula III is brominated with liquid bromine.

5. The process of claim 2, wherein the compound having general Formula IV is selected from the group consisting of N,N-dimethyl-para-phenylene diamine, N,N-diethyl-para-

phenylene diamine, 2,5-dimethyl-para-phenylene diamine and 2,5-diethyl-para-phenylene diamine.

6. The process of claim 2, wherein the organic solvent for dissolving the compound having general Formula IV is acetone.

7. The process of claim 2, wherein the mild base is selected from the group consisting of potassium carbonate, sodium carbonate, potassium bicarbonate and sodium bicarbonate.